



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Purchasing Receipts

PO No	Supplier	Line No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO40866	ACI001-VC	2	1	Net 30	M6061T6R0.750	6061-T6 Round Bar .750" : MATERIAL: 6061-T6 T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				60	9/14/2018	60		S110759	Stock	9/14/2018	\$ 1.95 / ft	3		\$117.00	Acier Ouellette Inc.
		3			M6061T6R5.000	6061-T6 Round Bar 5.000" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				6		6		S110761	Stock	9/14/2018	\$ 97.22 / ft	3		\$583.30	Acier Ouellette Inc.
		5			M303R0.625	303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft				12		12		S110762	Stock	9/14/2018	\$ 6.24 / ft	3		\$75.36	Acier Ouellette Inc.
		6			MT-H13-R0.625	AISI H13 Tool Steel Round Bar : MATERIAL: AISI H13 TOOL STEEL ROUND BAR AISI H13						6		S110763	Stock	9/14/2018	\$ 6.95 / ft	3		\$41.70	Acier Ouellette Inc.
		7			M304R1.000	304 Round Bar 1.00 : : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft				24		28		S110764	Stock	9/14/2018	\$ 12.65 / ft	3		\$353.80	Acier Ouellette Inc.
		8			MT-O1-B-0.375X0.500	Tool Steel Bar 0.375" X 0.500"						6		S110848	Stock	9/14/2018	\$ 26.65 / ft	3		\$159.90	Acier Ouellette Inc.
		9			MT-O1-R0.375	Tool Steel Round Bar 0.375 dia.						6		S110849	Stock	9/14/2018	\$ 6.65 / ft	3		\$39.90	Acier Ouellette Inc.
Total:												124								\$1,052.90	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040866

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO040866
PO Date: 8/28/18
Due Date: 8/31/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Phone:

E-MAILED
AUG 29 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30

Freight Terms:

Special Comments: QUOTE NO. SOU0128627, SOU0128223

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		MT-HRS-P-0.750		Hot Rolled Steel Plate 0.750" (44W) : MATERIAL: HOT ROLLED STEEL SHEET ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	8/31/18	32 sf	0 sf	32 sf	\$17.43625/sf	\$557.96
Line Item Note cutting price included in pricing of sheet.												
2		M6061T6R0.750		6061-T6 Round Bar .750" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	8/31/18	60 ft	0 ft	60 ft	\$1.95/ft	\$117.00
								60ft			At 18/09/17	
3		M6061T6R5.000		6061-T6 Round Bar 5.000" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	8/31/18	6 ft	0 ft	6 ft	\$97.21666/ft	\$583.30
								6ft			At 18/09/17	

PURCHASE ORDER

Line Item	Job	Part	Supplier Part No	Items									Unit Price (CAD)	Extend Price
				Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance				
4		M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	24 ft	0 ft	24 ft			\$39.10/ft	\$938.
5 ✓ AT		M303R0.625		303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft			\$6.236666/ft	\$74.8
6 ✓ AT		MT-H13-R0.625		AISI H13 Tool Steel Round Bar : MATERIAL: AISI H13 TOOL STEEL ROUND BAR AISI H13	Firmed	-	8/31/18	12 ft	0 ft	12 ft			\$6.95/ft	\$83.40
7 ✓ AT		M304R1.000		304 Round Bar 1.00 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	24 ft	0 ft	24 ft			\$12.654583/ft	\$303.71
8		MT-O1-B- 0.375X0.500		Tool Steel Bar 0.375" X 0.500"	Firmed	-	9/6/18	6 ft	0 ft	6 ft			\$26.65/ft	\$159.90
9		MT-O1-R0.375		Tool Steel Round Bar 0.375 dia.	Firmed	-	9/6/18	6 ft	0 ft	6 ft			\$6.65/ft	\$39.90
													Grand Total: \$2,858.41	

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/28/18 3:20 PM dart.lavoie.chantal



ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

Copy

CO00107252

Billed to

DART AEROSPACE LTD

Shipped to

2wrep

Instruction F-M

Att : CHANTAL LAVOIE Tél.: 613-632-5200
Delivery Route 5

Customer N° CLI0001056
Date 2018/08/30
Delivery date **2018/09/11**
Your order N° po040866
Processed by Denis Quenneville
Salesman BONNIE FRASER
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days

Product Description			Weight	Qty	UM	PCS NB			Internal Use Only				
						CMD	EXP	B/O	IN	I	S	C	OUT
1 ROUND ALU 3/4 6061-T6 * RAL-34 3 X 20" HEAT 68706			31.38	60.00	PI_\$CLB		3x20						
2 ROUND ALU 5 6061-T6 * RAL-5 1 X 6" HEAT SXA171313			138.24	6.00	PI_\$CLB		1x6						
3 SQUARE SS 1 SS303 NS CSS-1303 2 X AC19280-SM-2018/09/10			81.60	24.00	PI_\$CLB								
4 ROUND SS 5/8 303 RANDOM NS RSS-58303-V 1 X AC19280-SM-2018/09/10 HEAT 891B			12.52	12.00	PI_\$CLB		1x12 1/2"						
5 ROUND SS 1 304 (R) RSS-1 2 X HEAT 830W			64.08	24.00	PI_\$CLB		2x13 1/4"						
6 ROUND TOOL STEEL 5/8 H13 NS RH13-58 1 X AC19282-VA-2018/09/05 Heat 829392			12.52	12.00	PI		1x6						

RAL-34 # 5157

TRA-1723 49072

Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : LES ACIERS TRANSBEC (1997) LTEE.

Adresse / Address : 4054 BOUL. LE CORBUSIER, #201
LAVAL, QC
H7L5R2

commande order # : 7020941

bon de commande / Purchase order # : OU-47416

de matrice / Die # : MS 9909 Description : 3/4" ROD

Alliage & trempage / Alloy & temper : 6061 T6 Longueur / Length : 6097 mm

Contrôle / Control # : 85611-1

Coulée / Cast # : 68706

Dureté Rockwell E / Min. requis / Max. permis /
Rockwell E hardness : 91 HRE Min. required : 88 HRE Max. permitted : 100 HRE

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.05 Max	0.05 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	---	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre, date : 2017-03-28
Yours truly,

Daniel Alfredo Pelletier
Directeur Qualité
Quality Director

RA-34
1723

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6 T6510/T6511/T62 ALUMINUM ROUND BAR
SPECIFICATION:
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
PART NUMBER: M8061T6R1D DDD | D/A
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED
R 2009-09-09
MP

B	REFORMAT DWG. ADD B211 & B221 SPEC (ZN DB-1).	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
REV. B			
SHEET 1 OF 1			
TITLE 6061-T6 ROUND BAR			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 R2-750
DATE: 18/09/17

PO / BATCH NO.: P0040866/1110759

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 604
QUANTITY INSPECTED: 604
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750"
THICKNESS RECEIVED: 0.750"
SHEET SIZE ORDERED: -
SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	<u>Y</u>	N	
CORROSION	<u>Y</u>	<u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u>	N	<u>ASTM B211</u>
CORRECT THICKNESS	<u>Y</u>	N	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u>	N	<u>HT: 68706</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u>	N	
CORRECT M# ON THE MATERIAL	<u>Y</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____		
DATE: <u>18/09/17</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

S176

KAL-S-V

TR-1 2001

4951

Global Vietnam
Aluminium Co., Ltd

GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN B1-CONAC INDUSTRIAL ZONE, MY XUAN TOWN, TAN THANH DISTRICT,
BA RIA VUNG TAU PROVINCE, VIETNAM

Tel: +84(0)643924954

Fax: +84(0)643924953

MILL TEST CERTIFICATE

Date: 8 August, 2017

PO number: 17-P-292

Shipping Ref No.: 17-1489

LC No.: DC HMN713076

Date of issue: 28 July, 2017

Item Code: 1075703

Dio Number: D00530

Alloy & Temper: 6061-T6511

Production Description: CUSTOM ALUMINIUM EXTRUSION (Round Bar)
Round Bar 5"x 12' 6061-T6511

Length (inch): 144

Bundle number: 17-P-292-032, 17-P-292-035, 17-P-292-034, 17-P-292-033

Heat Number: SXA171313

Date: 24/07/2017

Applicable Specifications: ASTM B221 STANDARDS

CHEMICAL ANALYSIS: %

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									EACH	TOTAL	
0.659	0.993	0.240	0.264	0.017	0.088	0.013	0.022	98.619	<0.05	<0.10	21/7/2017

MECHANICAL ANALYSIS:

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
42.1	39.6	14.8	21/7/2017

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

Quality Manager:

TRUNG TÂM THỬ NGHIỆM CÔNG TY
THANH NIỆM TOÀN CẦU VIỆT NAM
GLOBAL VIETNAM ALUMINIUM
CO., LTD TESTING CENTER

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 R5.000
DATE: 18/09/17

PO / BATCH NO.: P0040866/S110761

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 644
QUANTITY INSPECTED: 644
QUANTITY REJECTED: 0

THICKNESS ORDERED: 5.000"
THICKNESS RECEIVED: 5.000"
SHEET SIZE ORDERED: -
SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	ASTM B221
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	HT 584171313
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____		
DATE: <u>18/09/17</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T651/T62 ALUMINUM ROUND BAR
 SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
 OR ASTM B211 OR ASTM B221
 PART NUMBER: M6061T6R(D,DDD)
 DIA.

WHERE "D,DDD" = DIAMETER IN INCHES
 EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED
 R 2009-09-09
MP

B	REFORMAT DWG. ADD B21 & B22 SPEC (ZIN D8-1), REF PAR 08-020A	CP	09 07 13
A	NEW ISSUE	DS	01 06 00
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	M6061T6R
TITLE	6061-T6 ROUND BAR
REV. B	SHEET 1 OF 1
SCALE	NTS
COPYRIGHT © 2009 BY DART AEROSPACE LTD	

107252

Dart

19280N



NORTH AMERICAN
STAINLESS

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 433808 02 Mail To:

Ship To:

Date: 8/01/2018 Page: 1 of 1

Customer:

NAS Order:

Your Order:

Heat Treat Code: 48,357

Item Code:

Steel: 303

Finish: Cold Draw

Dia/Thk: .6250 in

Leg Length:

Length: 144.00 in

Corrosion:

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30300, ASTM A582, EN 10204 3.1, ASTM A484/18
AMS 5640V TYPE 1, QQS-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BJ71547	3192								

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	Supplier Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
891B		US	.037	.10	17.15	.30	1.85	.321	.039	8.48	.032	.3370
			SI %									
			.46									

MECHANICAL PROPERTIES

1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ71547 R L	208.0	83.95	107.52	34.73	24.37

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS

Technical
Dept. Mgr.

KRIS LARK

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:
PART NUMBER:

ASTM A582
M303R10 DDD
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
EG 0.75" ROUND BAR = M303R0.750

RELEASED
2010-02-02
MR

B	REFORMAT D.M.G. ADD SPECS (REV 08-1)	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR			
APPROVED			
DE APPR			
DATE	10.01.05		

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	M303R
TITLE	303 ROUND BAR
REV. B	SHEET 1 OF 1
SCALE	NTS
COPYRIGHT © 2001 BY DART AEROSPACE LTD	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.625
DATE: 18/09/17

PO / BATCH NO.: P0040866 / S110762

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 12.083 Pt
QUANTITY INSPECTED: 12.083 Pt
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"
THICKNESS RECEIVED: 0.625"
SHEET SIZE ORDERED: -
SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	N	
CORROSION	Y	<input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	N	ASTM A582
CORRECT THICKNESS	<input checked="" type="radio"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	N	LIT: 891B
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>		SIGNED OFF BY: _____	
DATE: <u>18/09/17</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF COMPLIANCE / CERTIFICAT DE CONFORMITÉ

Order No. / No. Commande AC00019299	CUSTOMER / CLIENT LES ACIERS OUELLETTE INC	Packing slip / No. d'expédition L50750-01	DATE 07-09-18
MATERIAL ID# / No. MATÉRIEL 2013-2594	GRADE / NUANCE H-13	HEAT TREATMENT / TRAITEMENT THERMIQUE ANNEALED / RECUIT ADOUCI	HEAT / COUÉE B29392
PAYS D'ORIGINE UKRAINE			
SHAPE / FORME Round / Rond	SIZE / DIMENSION .6250" in.	SPECIFICATIONS ASTM A681	

CHEMICAL COMPOSITION / ANALYSE CHIMIQUE

	Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
mini/maxi	0.320 0.450	0.800 1.250	0.200 0.600	0.030
actuel (%):	0.380	0.990	0.370	0.024
	Sulfur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
mini/maxi	0.030	4.750 5.500	— —	1.100 1.750
actuel (%):	0.003	4.990	0.160	1.300
	Copper (Cu)	Vanadium (V)	Aluminium (Al)	Tungsten (W)
mini/maxi	—	0.800 1.200	— —	— —
actuel (%):	0.100	0.970	0.025	0.000

MECHANICAL PROPERTIES / PROPRIÉTÉS MÉCANIQUES

Yield strength / Élasticité	Tensile / résistance à la traction	Elongation / allongement (%)	Reduction of area / surface (%)	surface hd/dureté
PSI	PSI		0.0%	207 BHN

No weld repairs performed during the manufacturing of this product. We hereby certify that the above results have been verified and conform to the above mentioned specifications.

Aucune réparation exécutée par soudure durant la fabrication de ce produit. Par la présente nous attestons que les résultats ci-haut mentionnés ont été vérifiés et sont conformes aux spécifications.

Keith BALL

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI H13 TOOL STEEL ROUND BAR
SPECIFICATION: AISI H13
PART NUMBER: MT-H13-R (D.DDD)
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8" ROUND BAR = MT-H13-R0.625

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.09.20	SAC	WM

DART AEROSPACE		TITLE AISI H13 TOOL STEEL ROUND BAR	
DESIGN BY SAC 20/09/2017		CHECKED BY SAC 09/20/2017	
DRAWN BY SAC 09/20/2017		CHECKED BY SAC 09/20/2017	
DATE 09/20/2017		DATE 09/20/2017	
APPROVED BY SAC 09/20/2017		APPROVED BY SAC 09/20/2017	
DATE 20/09/2017		DATE 20/09/2017	
SCALE N/A		SCALE N/A	
SHEET 1 OF 1		SHEET 1 OF 1	
COPYRIGHT © 2017 BY DART AEROSPACE LTD			
ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M7-H13-R0.625

PO / BATCH NO.: P0040866/S110763

DATE: 18/04/17

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.625"

QUANTITY RECEIVED: 64+

THICKNESS RECEIVED: 0.625"

QUANTITY INSPECTED: 64+

SHEET SIZE ORDERED: -

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	<u>H. 12</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	<u>B29372</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/04/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

#5747

METALLURGICAL TEST REPORT

Certificate: 421337 4

Customer: 007036 510

Date: 6/19/2018 Page: 1

Steel: 304/304L

Finish: CD

Your Order: 4500877234

NAS Order: PN 0094808 01

Heat Treat Code: 47,519

Corrosion: ASTM A262/15 Prac A/E OK
Red Ratio: 69.4 :1

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30400/30403 EN 10204 3.1, ASTM A484/16
ASTM A276/17, ASTM A479/18, ASTM A182/16a CHEM ONLY,
ASME SA479/18, ASME SA182/13 CHEM ONLY
AMS 5639J, AMS 5647K, AMS QQS-763D, QQS-763F, ASTM F899/12b
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8
ASTM A193/16-ASME SA193/13 CL 1 GR B8

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU. ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BJ6071 8		1.0000		1,201	144.00	1	1	160008471

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) ANAB, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
830W	US	.022	.17	18.27	.34	1.38	.278	.065	8.61	.031
S % SI %										
.0270 .21										

MECHANICAL PROPERTIES

Product Id	Id	HB	.2YS	UTS	RA	Elong
BJ6071 8	RL	196.0	78.39	100.28	64.12	41.08

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS LARK

6/19/2018

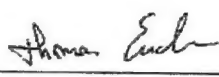
CERTIFICATION DU MATÉRIEL**CLIENT:**
SALABERRY-DE-VALLEYFIELD**ACIER OUELLETTE INC DIV.DE****935 BOUL DU HAVRE
SALABERRY-DE-VALLEYFIELD, QUEBEC
QC J6S 5L1****NUMÉRO DE COMMANDE:** 14975896 000020
COMMANDE DU CLIENT: ac00018459 20
NUMÉRO DE PIÈCES:
NUMÉRO DE LIVRAISON: 803802592 000020**NUMÉRO D'ARTICLE:** 160008471
DESCRIPTION INVENTAIRE: RD CF 304/304L ANN 1 X 144RL**DESCRIPTION ARTICLE FINIS:** INOX Barre RD FF(CF) 304/304L
1po X 144po LA**NUMERO (S) DE COULÉE** **BRAME / BOBINE / TIN (le cas échéant)**
830W BJ6071 8**CERTIFICATION**

Un sondage de nos sources matérielles a indiqué que ni le mercure ni des substances radioactives ne sont introduits dans leurs produits ni ne sont utilisés dans aucun de leurs procédés. Alors que nous ne faisons aucun test indépendant pour le mercure ou la radiation, il n'y a rien dans le système de qui pourrait entraîner la contamination de l'un ou l'autre type.

Ce document certifie que le matériel décrit ci-dessus a été expédié conformément à votre commande. Le producteur du matériel a certifié à qu'il a été produit conformément aux spécifications suivantes:

ASTM A276 A479 UNS S30403 AMS 5639 5647 QQ-S-763 ASME SA479

07/30/2018


Thomas Endres
Vice-président - Approvisionnement

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR
(NOTE: AISI 303 NOT ACCEPTABLE)

ASTM A276

PART NUMBER:

M304R(D.DDD)
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M304R0.750

RELEASED
07/28/25

B	REFORMAT DWG. ADD SPECS (CN D6-1).	CP	09.07.15
A	NEW ISSUE	AJS	08.03.03
REV.	DESCRIPTION	BY	DATE
DRAWN	ASS		
CHECKED	GA		
MFG APPR.			
APPROVED			
DE APPR.			
DATE	09.07.15		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. B	
DRAWING NO. M304R		SHEET 1 OF 1	
TITLE		SCALE	
304/316 ROUND BAR		NTS	
COPYRIGHT © 2008 BY DART AEROSPACE LTD			
ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304 R1.000
 DATE: 18/04/17

PO / BATCH NO.: P0040866/S110764

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 27.958ft
 QUANTITY INSPECTED: 27.958ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"
 THICKNESS RECEIVED: 1.000"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____	
DATE: <u>18/04/17</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in